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VARIATIONS OF COLOR IN FLOWERS.—Botanizing recently with some friends on the Malden Highlands, (Mass.), we found a pure white variety of *Gerardia tenuifolia*. The color was clear and distinct, and as the plants were growing with the purple-flowered, without any intermediate tints, it seemed to be a remarkable instance of transition from a primary to another, and an extremely different color. Further on, however, we found one purple-flowered plant with a single branch bearing white flowers with a single large purple blotch on each of the lower petals, being a very pretty sport.

More recently, on going over the same ground alone, I found plants with the flowers all pure white, and plants with the flowers all variegated purple and white.

As I have not before met with such a variation in this species, and do not recall any mention of it, I thought it might be of sufficient interest to make a note of, merely as another instance on the part of certain colors to vary to white, and in connection with it offer the following notes:

Some flowers that vary to white pass through a certain transition of tints from the formation of the bud until the full expansion of the flower, before becoming pure white, while others are white from the first starting of the bud. In the former instance the flowers on being pressed return to what we might call the bud color, and retain that color when dry. In the latter instance the flowers remain white after being pressed, and becoming dry. In the case of the Gerardia, I find that all the flowers that were white, when fully expanded remain white after being pressed, showing no transition of tints in their development.

There is a very pretty rose-colored variety of this species of Gerardia that not only retains the color of its flowers on being pressed, but, also, retains the color of its stem and foliage, instead of turning black like the normal condition of the species. This appears to be the case also with the white variety that I have now pressed.

It is not always the case that a change of color in a flower is an improvement, but this little white Gerardia pleases me even more than the purple.

We have in Massachusetts one of the most beautiful flowers in all the floral kingdom—the charming *Sabbatia chloroides*. The exquisite tint of this lovely flower is something that escapes description. To call it pink, rose color, or rose pink, as is sometimes done, does not seem to me to express it at all, and certainly does not give any idea of the beautiful markings that encircle the base of the petals. But this indescribable tint, with the most delicately-faint, but deliciously-sweet odor, that is scarcely perceptible in a single flower, but which, when the flowers are gathered in a bunch and placed in a vase, will gradually fill a room with a perfume even more delicate, and no less sweet than that of the wild rose, combine to make this gem of midsummer an object of admiration to all who see it.

I have introduced this notice of it here in order to mention a white variety that also grows with us, but which, to me, is interesting only as a novelty that serves, by way of contrast, to make the superior beauty of the other still more conspicuous.

This white variety, however, is peculiar in the transition of tints that it undergoes in expanding its flowers. The bud, and half-opened flowers are of a pale lavender color which gradually fades out until it becomes white in the fully expanded flowers; these white flowers again on being pressed, return to the lavender tint which they continue to retain on becoming dry.

Perhaps the most remarkable instance of a flower varying to white is that of *Lobelia cardinalis*; but the white variety is certainly no improvement on the primary color. The glory of the Cardinal flower is in its intense flaming scarlet that oftentimes lights up the dark ravines as with torches of fire, and this glory vanishes just in proportion as the color changes into rose, white, or as I once found it, variegated white and red The white variety is interesting as a novelty, and retains its color on being pressed. The stems, too, are not so dark and purple as the stems in the other, and the whole plant is much lighter colored.

Blue, pink and purple colors frequently vary to white; yellows seldom. But Mr. Faxon mentioned finding a white variety of *Impatiens pallida*, which on being pressed, returned to the pale yellow color of the species.

These notes might be extended to considerable length, but I have already, I fear, trespassed too much on your space.—Geo. E. Davenport, *Boston, September*, 1877.

Note.—Since writing these notes, a lady who has found a white variety of *Mimulus ringens*, tells me that she has also found the white variety of *Gerardia tennifolia*.

Notes by C. F. Austin.—Erpodium biseriatum (?)*Lejeunia biseriata*, Aust. *in Proc. Phila Acad. for March*, 1869, *p.* 225. Stems (so far as is known) less than ¾ of an inch long and simple, sub-julaceous when dry, resembling short simple stems of *Frullania squarrosa*. Dorsal (or lateral) stem-leaves broadly ovate-oval, convex, very obtuse, imbricated, succubous, convolute-appressed when dry, widely spreading when moist, reddish or fuscous brown, entire, minutely and closely papillose, the whole lower margin strongly recurved; areolation composed of small opake roundish or oval cells, which are enlarged in the centre towards the base of the leaf, while those on its margin are somewhat translucent. Ventral leaves much smaller (about ⅓ as wide and ⅔ as long) and stipule-like, linear-oblong, plane, attached diagonally to the stem opposite the base of the dorsal leaves, erect-divaricate. Flowers and fruit unknown. Rootlets stout, brown, simple, jointless, proceeding from the base of the ventral leaves (always?). (Georgia, Sullivant.)

In *E. Domingense*, Brid. (Cuba, Wright), the ventral leaves are nearly as large as the dorsal ones, which latter have a somewhat lingulate apex. Perichætial leaves not 4-ranked. Calyptra conic-campanulate, covering about ½ of the capsule. Peristome of a few imperfect ciliæ-like teeth, inserted within the mouth of the capsule. Monœcious male; flower eparaphysate.

Hypnum (Harpidium) Jamesii, *n. sp.*—Compacte cæspitosum; caule fragili erecto subflexuoso remote innovandi ramoso vel simplici, foliis subhomomallo-uncinatis valde concavis lanceolatis attenuato-acuminatis basi sensim angustatis margine integerrimis (nonnullove obscure serratis), costa basi lata crassiuscula in medio sensim defluente cellulis mediocriter magnis lineari-fusiformibus rectis vel subflexuosis, basilaribus infimis multum brevioribus vix latioribus, auricularibus perpaucis subinflatis demum badiis; flores et fructus ignoti. White Mountains, New Hampshire, *James*.

Having diligently compared this moss with all the species of *Harpidium* known to me without being able to identify it, I have reluctantly concluded to describe it as new. It resembles in size and somewhat in appearance *Hypnum fluitans* var. *turfaceum*, while in its subsimple stems it is much like *H. revolvens*; but the former has the leaf of a totally different texture, serrate at the apex, etc., and the latter has a longer more circinnate leaf with narrower cells (but a somewhat similar costa). *H. vernicosum* is a much branched species with a similarly shaped leaf, but the cells, as in *H. revolvens*, are closer, those at the base not at all inflated, costa narrower and thinner, etc.

A form of *H. uncinatum*, with *leaves perfectly estriate*, occurs in great abundance in the Alpine region of the White Mountains. The inflorescence of this species is polygamous. Mr. Peck has collected a form of this species in the Adirondack (without